d) [an electrolyte supply fluidly connected to the one or more electrical processing

- e) a spin-rinse-dry (SRD) chamber disposed between the loading station and the mainframe; and
- f)] a thermal anneal chamber disposed [adjacent the loading station] in connection with the mainframe.
- 2. The system of claim 1 wherein the thermal anneal chamber comprises a rapid thermal anneal chamber having a heater plate.
- 3. The system of claim 2 wherein the heater plate comprises an atmospheric pressure heater plate.
- 4. The system of claim 1, further comprising:
- e) a system controller adapted to control operations of one or more components of the electro-chemical deposition system.
- 5. The system of claim 4, wherein the thermal anneal chamber further comprises a gas inlet adapted to introduce one or more gases into the thermal anneal chamber.
- 6. The system of claim 5 wherein the system controller [controls] is adapted to control the gas inlet to the chamber to provide a chamber environment having an oxygen content of less than 100 parts per million.
 - 7. The system of claim 6 wherein the gas inlet is connected to a nitrogen gas source to introduce nitrogen into the chamber.
 - 8. The system of claim 6 wherein the gas inlet is connected to a nitrogen gas source and a

hydrogen gas source to introduce nitrogen and hydrogen into the chamber, wherein the hydrogen content is maintained at less than about 4%.

- B3
- 9. The system of claim 1 wherein the loading station comprises:
 - i) one or more wafer cassette receiving areas; and
- ii) one or more loading station wafer transfer robots for transferring a wafer between the loading station and the <u>mainframe</u> [SRD station and between the loading station and the thermal anneal chamber; and
 - iii) a wafer orientor].

Please add the following new claims:

- B40 On On
- --10. The apparatus of claim 9, wherein the thermal anneal chamber is disposed in connection with the mainframe through the loading station and the one or more loading station wafer transfer robots are adapted to transfer a wafer between the loading station and the thermal anneal chamber.
- 11. The apparatus of claim 10, further comprising:
- a spin-rinse-dry (SRD) station disposed on the mainframe at a position adjacent the loading station.
 - A method for depositing metal on a substrate, comprising:

electro-chemically deposit a metal layer on the substrate in an electro-chemical deposition cell disposed on a mainframe of an electro-chemical deposition system; and

annealing the substrate in a thermal anneal chamber disposed in connection with the mainframe of the electro-chemical deposition system.

13. The method of claim 12, further comprising:

performing a spin-rinse-dry process on the substrate before annealing the substrate.

- 14. The method of claim 12, wherein the substrate is annealed in a nitrogen environment.
- 15. The method of claim 12, wherein the substrate is annealed in a chamber environment having an oxygen content of less than 100 parts per million.
- 16. The method of claim 12, wherein the substrate is annealed between about 200°C and about 450°C for between about 30 seconds and about 30 minutes.
- 17. The method of claim 12 wherein the substrate is annealed at about atmospheric pressure.
- An apparatus for depositing metal on a wafer, comprising:

 a mainframe having a mainframe wafer transfer robot;

 a loading station disposed in connection with the mainframe;

 one or more electro-chemical deposition cells disposed on the mainframe; and
 one or more anneal chambers disposed in connection with the mainframe.
- 19. The apparatus of claim 18, wherein the one or more anneal chambers comprise one or more rapid thermal anneal chambers.
- 20. The apparatus of claim 18, wherein the one or more anneal chambers are disposed in connection with the mainframe through the loading station.--